

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-2 (Cancelled)

3. (Previously Presented) The piezoelectric/electrostrictive device according to claim 8, wherein said actuator section comprises ten or less of said actuator films.

4. (Previously Presented) The piezoelectric/electrostrictive device according to claim 8, wherein each of said actuator films is formed by means of a thick film printing method.

Claim 5 (Cancelled)

6. (Currently Amended) The piezoelectric/electrostrictive device according to claim 8, wherein said adhesive has a thickness of not more than 15 μmm .

7. (Previously Presented) The piezoelectric/electrostrictive device according to claim 8, further comprising an underlying layer formed on a surface of said stacked type piezoelectric/electrostrictive elements opposed to a respective one of said thin plate sections.

8. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein said actuator section includes at least three actuator films comprising piezoelectric/electrostrictive layers and electrode films, wherein one or more holes are formed in at least a portion of said thin plate sections on which said stacked type piezoelectric/electrostrictive elements are formed, said one or more holes being formed entirely through said thin plate sections in the thickness direction.

9. (Previously Presented) The piezoelectric/electrostrictive device according to claim 8, wherein at least a portion of a surface of each of said thin plate sections, on

which said stacked type piezoelectric/electrostrictive element is formed, is a rough surface.

Claim 10 (Cancelled)

11. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein said at least one stacked type piezoelectric/electrostrictive element has a substantially rectangular parallelepiped-shaped configuration.

12. (Currently Amended) The piezoelectric/electrostrictive device according to claim 76, wherein said predetermined distance between said terminals is not less than 50 μmm.

13. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein at least one of said terminals and one of said end surface electrodes are electrically connected with each other with an electrode film having a film thickness which is thinner than those of said terminal and said end surface electrode.

14. (Currently Amended) A piezoelectric/electrostrictive device comprising:
a pair of mutually opposing thin plate sections, and a fixation section for supporting said thin plate sections; and
one or more piezoelectric/electrostrictive elements arranged on at least one thin plate section of said pair of thin plate sections, wherein
a minimum resonance frequency of said piezoelectric/electrostrictive device structure, which is obtained when an object member having a size substantially equivalent to that of said fixation section exists between open ends of said pair of thin plate sections, is not less than 20 kHz, and a relative displacement amount between said object member and said fixation section is not less than 0.5 μmm at a substantial applied voltage of 30 V at a frequency which is not more than 1/4 of said resonance frequency.

15. (Previously Presented) The piezoelectric/electrostrictive device according to claim 14, further comprising an adhesive intervening between said

piezoelectric/electrostrictive element and said at least one thin plate section, said adhesive having a thickness which is not more than 10 % of a thickness of said piezoelectric/electrostrictive element.

16. (Previously Presented) The piezoelectric/electrostrictive device according to claim 14, wherein said one or more piezoelectric/electrostrictive elements are arranged on one thin plate section of said pair of thin plate sections, and a thickness of said one thin plate section is thicker than a thickness of the other thin plate section.

17. (Currently Amended) The piezoelectric/electrostrictive device according to claim 14, wherein said object member intervenes between said open ends of said pair of thin plate sections, and a distance of said pair of thin plate sections between a boundary portion of said object member and a boundary portion of said fixation section is not less than 0.4 mm and not more than 2 mm, and each of said pair of thin plate sections has a thickness which is not less than 10 ~~μmmmm~~ and not more than 100 ~~μmmmm~~.

18. (Previously Presented) The piezoelectric/electrostrictive device according to claim 14, wherein said piezoelectric/electrostrictive element comprises a multilayered member including at least three or more actuator films comprising piezoelectric/electrostrictive layers and electrode films.

19. (Previously Presented) The piezoelectric/electrostrictive device according to claim 18, wherein said piezoelectric/electrostrictive element comprises said multilayered member having ten or less actuator films.

20. (Currently Amended) The piezoelectric/electrostrictive device according to claim 18, wherein said piezoelectric/electrostrictive layer has a thickness which is not less than 5 ~~μmmmm~~ and not more than 30 ~~μmmmm~~.

21. (Currently Amended) The piezoelectric/electrostrictive device according to claim 18, wherein said electrode film, which is interposed at least between said piezoelectric/electrostrictive layers, has a thickness which is not less than 0.5 ~~μmmmm~~ and not more than 20 ~~μmmmm~~.

22. (Previously Presented) The piezoelectric/electrostrictive device according to claim 18, wherein said plurality of electrode films, which are included in said multilayered member for constructing said piezoelectric/electrostrictive element, are stacked alternately, and are connected so that an identical voltage is applied to every other electrode layer.

23. (Original) The piezoelectric/electrostrictive device according to claim 22, wherein said piezoelectric/ electrostrictive element is formed such that only a first piezoelectric/electrostrictive layer, or both of a first electrode film and a first piezoelectric/electrostrictive layer of the multilayered member for constructing the piezoelectric/electrostrictive element make contact with said thin plate section.

24. (Previously Presented) The piezoelectric/electrostrictive device according to claim 22, wherein one end of said electrode layer is formed at a position not including at least said fixation section as viewed in plan view.

25. (Original) The piezoelectric/electrostrictive device according to claim 18, wherein an end of said multilayered member for constructing said piezoelectric/electrostrictive element is formed at a position not including at least said fixation section as viewed in plan view.

26. (Previously Presented) The piezoelectric/electrostrictive device according to claim 24, wherein said object member intervenes between said open ends of said pair of thin plate sections, and $(1 - L_b/L_a)$ is not less than 0.4, wherein,

L_a represents a shortest distance of said pair of thin plate sections between a boundary portion of said object member and a boundary portion of said fixation section, and

L_b represents a shortest distance of said thin plate section on which said multilayered member is not formed from one of said object member and fixation member boundary portions between said thin plate sections to an end of said electrode film.

27. (Original) The piezoelectric/electrostrictive device according to claim 26, wherein $(1 - L_b/L_a)$ is 0.5 to 0.8.
28. (Previously Presented) The piezoelectric/electrostrictive device according to claim 14, wherein said thin plate sections comprise a metal.
29. (Previously Presented) The piezoelectric/electrostrictive device according to claim 28, wherein said thin plate sections comprise a metal plate subjected to a cold rolling process.
30. (Currently Amended) The piezoelectric/electrostrictive device according to claim 18, further comprising an adhesive having a thickness of not less than $0.1 \mu\text{mm}$ and not more than $30 \mu\text{m}$ intervening between said thin plate sections and said multilayered member for constructing said piezoelectric/electrostrictive element.
31. (Previously Presented) The piezoelectric/electrostrictive device according to claim 30, wherein said adhesive comprises an organic resin.
32. (Previously Presented) The piezoelectric/electrostrictive device according to claim 30, wherein said adhesive comprises glass, brazing material, or solder.
33. (Previously Presented) The piezoelectric/electrostrictive device according to claim 30, further comprising an underlying layer formed on a surface of said multilayered member opposed to a respective one of said thin plate sections.
34. (Previously Presented) The piezoelectric/electrostrictive device according to claim 30, wherein one or more holes or recesses are formed in at least a portion of said thin plate sections on which said multilayered member is formed.
35. (Previously Presented) The piezoelectric/electrostrictive device according to claim 30, wherein at least a portion of a surface of each of said thin plate sections, on which said multilayered member is formed, is a rough surface.

36. (Currently Amended) The piezoelectric/electrostrictive device according to claim 14, further comprising an adhesive having a thickness of not less than 0.1 ~~ummm~~ and not more than 30 μm intervening between said thin plate section and at least said fixation section.

37. (Previously Presented) The piezoelectric/electrostrictive device according to claim 36, wherein said adhesive comprises an organic resin.

38. (Previously Presented) The piezoelectric/electrostrictive device according to claim 36, wherein said adhesive comprises glass, brazing material, or solder.

39. (Original) The piezoelectric/electrostrictive device according to claim 36, wherein a stick-out shape of said adhesive, which protrudes from an opposing portion between said thin plate section and at least said fixation section, has a curvature.

40. (Previously Presented) The piezoelectric/electrostrictive device according to claim 36, wherein an object member intervenes between open ends of said pair of thin plate sections, and at least an angular portion of said fixation section opposed to said object member is chamfered.

41. (Previously Presented) The piezoelectric/electrostrictive device according to claim 36, wherein said thin plate section is manufactured by means of stamping of a metal plate, and a burr, which is brought about by said stamping, is directed outwardly.

Claims 42-67 (Cancelled)

68. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein said actuator section comprises ten or less of said piezoelectric/electrostrictive layers.

69. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein each of said stacked type piezoelectric/electrostrictive elements is formed by means of a thick film printing method.

70. (Currently Amended) The piezoelectric/electrostrictive device according to claim 76, wherein said adhesive has a thickness of not more than 15 μmm.

71. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, further comprising an underlying layer formed on a surface of said stacked type piezoelectric/electrostrictive element opposed to a respective one of said thin plate sections.

72. (Previously Presented) The piezoelectric/electrostrictive device according to claim 76, wherein at least a portion of a surface of each of said thin plate sections, on which said stacked type piezoelectric/electrostrictive elements are formed, is a rough surface.

73. (Previously Presented) The piezoelectric/electrostrictive device of claim 76, wherein said end surface electrodes each include a major plane extending substantially perpendicular to planes of said electrode films.

Claims 74-75 (Cancelled)

76. (Previously Presented) A piezoelectric/electrostrictive device comprising:

- a pair of mutually opposing thin plate sections made of metal, said thin plates each having a width “b” and being spaced apart by a distance “a,” such that a ratio a/b is 0.5 to 20;

- a fixation section for supporting said thin plate sections;

- a movable section disposed at an opposite end of said thin plate sections from said fixation section, at least one of said movable section and said fixation section including a slot defined only by planar opposing surfaces;

- an actuator section with at least one stacked type piezoelectric/electrostrictive element fixed on at least one of said thin plate sections by the aid of an adhesive, said at least one stacked type piezoelectric/electrostrictive element comprising a plurality of piezoelectric/electrostrictive layers and electrode films, said electrode films contacting upper and lower surfaces of respective piezoelectric/electrostrictive layers and alternately extending to opposite end surfaces thereof; and

end surface electrodes electrically connecting an electrode film that contacts one of said piezoelectric/electrostrictive layers and an electrode film that contacts another one of said piezoelectric/electrostrictive layers, said end surface electrodes being formed on respective outer side surfaces of said actuator section and being electrically connected to terminals which are provided on a surface of an outermost layer of said piezoelectric/electrostrictive layers, said terminals being separated from one another by a predetermined distance,

wherein said at least one stacked type piezoelectric/electrostrictive element is disposed partially on said thin plate section and said fixation section, or partially on said thin plate section and said movable section.

77. (Previously Presented) A piezoelectric/electrostrictive device comprising:

a pair of mutually opposing thin plate sections made of metal, said thin plates each having a width of 50 μm to 2000 μm and being spaced apart by a distance of 100 μm to 2000 μm ;

a fixation section for supporting said thin plate sections;

a movable section disposed at an opposite end of said thin plate sections from said fixation section, at least one of said movable section and said fixation section including a slot defined only by planar opposing surfaces;

an actuator section with at least one stacked type piezoelectric/electrostrictive element fixed on at least one of said thin plate sections by the aid of an adhesive, said at least one stacked type piezoelectric/electrostrictive element comprising a plurality of piezoelectric/electrostrictive layers and electrode films, said electrode films contacting upper and lower surfaces of respective piezoelectric/electrostrictive layers and alternately extending to opposite end surfaces thereof; and

end surface electrodes electrically connecting an electrode film that contacts one of said piezoelectric/electrostrictive layers and an electrode film that contacts another one of said piezoelectric/electrostrictive layers, said end surface electrodes being formed on respective outer side surfaces of said actuator section and being electrically connected to terminals which are provided on a surface of an outermost

layer of said piezoelectric/electrostrictive layers, said terminals being separated from one another by a predetermined distance,

wherein said at least one stacked type piezoelectric/electrostrictive element is disposed partially on said thin plate section and said fixation section, or partially on said thin plate section and said movable section.

78. (Previously Presented) A piezoelectric/electrostrictive device comprising:

a pair of mutually opposing thin plate sections made of metal;

a fixation section for supporting said thin plate sections;

a movable section disposed at an opposite end of said thin plate sections from said fixation section and spaced a distance L_a from said fixation section, at least one of said movable section and said fixation section including a slot defined only by planar opposing surfaces;

an actuator section with at least one stacked type piezoelectric/electrostrictive element fixed on at least one of said thin plate sections by the aid of an adhesive, said at least one stacked type piezoelectric/electrostrictive element comprising a plurality of piezoelectric/electrostrictive layers and electrode films, said electrode films contacting upper and lower surfaces of respective piezoelectric/electrostrictive layers and alternately extending to opposite end surfaces thereof such that a first end of each said electrode film is positioned at one of said opposite end surfaces and a second end of said electrode film extends a distance short of another of said opposite end surfaces, whereby said second end of one of said electrode films located nearest said movable section is spaced a distance L_b from said movable section; and

end surface electrodes electrically connecting a first end of an electrode film that contacts one of said piezoelectric/electrostrictive layers and a first end of an electrode film that contacts another one of said piezoelectric/electrostrictive layers, said end surface electrodes being formed on respective outer side surfaces of said actuator section and being electrically connected to terminals which are provided on a surface of an outermost layer of said piezoelectric/electrostrictive layers, said terminals being separated from one another by a predetermined distance,

wherein said at least one stacked type piezoelectric/electrostrictive element is disposed partially on said thin plate section and said fixation section, or partially on said thin plate section and said movable section, and
wherein $(1-Lb/La)$ is not less than 0.4.